Exercise 4B – Question 12

The difference between the SI and CI on ₹2,400 for 2 years at 5% p.a. is:

(a) ₹5 (b) ₹10 (c) ₹16 (d) ₹6

Difference between C.I & S.I.

$$CI - SI = P\left[\left\{\left(1+\frac{R}{100}\right)^{T}-1\right\}-\frac{RT}{100}\right]$$

Ex 4B – Question 12.

$P = 2400 \quad T = 2 \text{ years} \quad R = 5\%$

$$CI - SI = P\left[\left\{\left(1+\frac{R}{100}\right)^{T}-1\right\}-\frac{RT}{100}\right]$$

$$CI - SI = 2400\left[\left\{\left(1+\frac{5}{100}\right)^{2}-1\right\}-\frac{5\times 2}{100}\right]$$

$$CI - SI = ₹6$$

Or

$$CI = P\left[\left(1+\frac{R}{100}\right)^{T}-1\right]$$

$$CI = 2400\left[\left(1+\frac{5}{100}\right)^{2}-1\right]$$

$$CI = 246$$

and $$SI = \frac{P \times R \times T}{100}$$

$$S.I = \frac{2400 \times 5 \times 2}{100}$$

$$S.I = 240$$

Now, C.I − S.I

$= 246 - 240$

$= ₹6/-$

Additional Question Bank – Question 1

The difference between compound and simple interest at 5% per annum for 4 years on ₹20,000 is:

(a) ₹250 (b) ₹277 (c) ₹300 (d) ₹310

AQB - Question 1

$P = 20,000 \quad R = 5\% \quad T = 4 \text{ years}$

$$CI - SI = P\left[\left\{\left(1 + \frac{R}{100}\right)^{T} - 1\right\} - \frac{R \times T}{100}\right]$$

$$CI - SI = 20,000\left[\left\{\left(1 + \frac{5}{100}\right)^{4} - 1\right\} - \frac{5 \times 4}{100}\right]$$

$$CI - SI = 310.125 =$$

Exercise 4B – Question 7

The difference between C.I. and S.I. on a certain sum of money invested for 3 years at 6% p.a. ₹110.16. The principal is:

(a) ₹3,000 (b) ₹3,700 (c) ₹12,000 (d) ₹10,000

Ex. 4B – Q7

CI - SI = 110.16 P = ? T = 3 years

R = 6%

$$CI - SI = P\left[\left\{\left(1 + \frac{R}{100}\right)^T - 1\right\} - \frac{RT}{100}\right]$$

$$P = \frac{CI - SI}{\left[\left\{\left(1 + \frac{R}{100}\right)^T - 1\right\} - \frac{RT}{100}\right]}$$

$$P = \frac{110.16}{\left[\left\{\left(1 + \frac{6}{100}\right)^3 - 1\right\} - \frac{6 \times 3}{100}\right]}$$

P = 10,000/-